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Babcock & Wilcox Company

a McDermott company

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(330) 753-

June 7, 2002

INTERMOUNTAIN POWER

850 W. Brush Wellman Road
Delta, Utah 84624-9546

Attention: Mr. James Nelson

Re: Capacity Increase / Low NOx
Subj: Budgetary Pricing
B&W Proposal P-003111

Dear Mr. Nelson:

B&W is pleased to offer the following budgetary pricing for materials and installation to increase capacity and also to reduce NOx for Intermountain Power Station Unit #1, B&W Boiler RB-614.

Scope of Supply**Item 1 Overfire Air System (Phase 1)**

- 1.1 Windbox NOx compartment (installed on top of existing front and rear windboxes) to be designed for present and future NOx ports including:
Platework with expansion folds and attachment hardware.
Feeder ductwork with expansion joints and air monitors.
Supports for feeder ductwork.
- 1.2 Water wall panel insert openings for 6 to 7 NOx ports Including:
1 panel insert (opening) for each NOx port.
Membrane tube construction will be the same as present furnace walls.
- 1.3 Total of 6 to 7 Dual Air Zone NOx Port registers including:
Supports between windbox and wall tubes.
Pitot tube.
2 thermocouples per port.
Automatic sliding air damper.
Initial adjustment and calibration of NOx ports.
Operating Instruction Manuals.

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- 1.4 Total of 48 perforated plate shrouds to restrict air flow at existing Dual Register Burners.
- 1.5 Engineering and Project Management.
- 1.6 Freight to job-site.
- 1.7 Removal of all front and rear sootblowers at elevation 4806"-11". Any remaining holes will be plugged by B&W Construction.

Item 2 Platen SH extensions

- 2.1 Increase lower portion of existing Platen SH by approximately 8'. Existing SH Platens will be cut approximately 2' above the existing inside loops. New extended partial lower loops will be field welded to the existing elements and shall each include new crossover tubes and ties. There are 16 front loop sections and 16 rear loop sections for a total of 32 partial loop section extensions. Crossover ties will be partially shop attached and partially field attached. Tube materials will be SA213T22 and SA213TP347H. B&W current design split ring castings will be used for alignment at the lowest elevation.

Not Included

- 1. Support collector steel or support rods if required for Platen SH.
- 2. Engineering review of metals (for Platen SH or outlet header).
- 3. Modifications to the existing burner control system.
- 4. Burner modifications (other than mentioned above).
- 5. Control modifications or field wiring.
- 6. New sootblowers or relocation of sootblowers.
- 7. Support steel or platforms for access to the NOx ports outside of the boiler.
- 8. Performance Guarantees or testing (pre or post).
- 9. Tuning or testing equipment.
- 10. B&W Field Engineering Service.

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11. Bonding Costs
12. Sales or Use Taxes

OFA
3+4 Pats

Predicted Performance

The furnace platen extension is offered as a means of increasing the total superheater absorption by allowing some degradation in furnace cleanliness while maintaining a constant furnace exit gas temperature. In effect, the platen absorption increases with the greater surface and higher gas temperature entering the platens while holding FEGT. The expected performance of the superheater and platens has been based on a total excess air leaving the economizer of 20% or 18% to the combustion equipment. This is a 2 point increase from the original design and is a result of the expected addition of an OFA system. The nominal 8' platen extension will allow the gas temperature entering the platens to increase by approximately 35F while maintaining a constant furnace exit gas temperature. Under these conditions, the superheater absorption will increase by about 2.5% or an increase in spray will occur by approximately 80 to 100mlb/hr (an equivalent superheater spray down of 6F) if the base condition is a 1005 F steam temperature with no spray. It is important to note that the basis of the superheater performance increase is the ability to increase the gas temperature entering the platens. For a constant furnace cleanliness condition, the platens will provide no measurable change in superheater or reheater performance. While the overall secondary superheater inlet bank cleanliness is not expected to change as long as the FEGT is held constant, there may be somewhat increased cleaning required of the lowest section of the this bank as the FEGT is increased to improve superheater performance.

Based on a current NOx emission rate of 0.4 to 0.45 LBS/ million BTU, we would predict that the OFA system will reduce NOx to below 0.4 LBS / million BTU. CO and LOI will definitely increase. As this is a "partial" OFA system, we have no way (no operational experience) to predict performance impact to these items.

10-15%

Budgetary Pricing and Progress Payment Schedule (1 unit only)

Budgetary OFA and SH Platen – Materials \$ 1,200,000

Budgetary OFA and SH Platen – Installation * \$ 2,300,000 - \$ 2,900,000

* We are still working on this price.

Payments:

% Of Price

Milestone

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50% of material	Receipt of Raw Mat'l at Shop
50% of material	Shipment Complete On-Site
50% of installation	Installation Mid-point
50% of installation	Installation Complete

Delivery and Installation

Delivery on-site for items 1 and 2 as described above is approximately 7 months after receipt of acceptable order. Installation time will require approximately 5 weeks not including mobilization or de-mobilization time.

in 31 weeks

Commercial Terms and Conditions

This proposal is predicated upon the application of B&W Standard Terms and Conditions.

Technical Conditions

This proposal is based on design and manufacturing in accordance with ASME Boiler and Pressure Vessel Code along with B&W technical design and manufacturing standards, which shall form the technical basis of a resulting contract.

We look forward to your favorable evaluation of this budgetary proposal and appreciate the opportunity to be of service to Intermountain Power. Please feel free to contact us if you require additional information.

Very truly yours,

BABCOCK & WILCOX COMPANY

Roger J. Kleisley
Regional Project Manager

cc: M. A. Costanzo – Barborton Service Projects
J. S. Metzger – Barborton Service Projects
G. S. Bernstein – Denver Sales

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